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10/582,787	06/13/2006	Masato Kaneda	Q79148	5976
23373 7590 12/03/2010 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037				
EXAMINER				
BOFF, ANCA				
ART UNIT		PAPER NUMBER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/582,787

Applicant(s)

KANEDA ET AL.

Examiner

ANCA EOOF

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 September 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3,6,12,14,16,18 and 19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3,6,12,14,16,18 and 19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB06)
Paper No(s)/Mail Date 09/27/2010
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ ~~Notes of Informal Patent Application~~
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 3, 6, 12, 14, 16, 18 and 19 are pending. Claims 1, 2, 4, 5, 7-11, 13, 15 and 17 have been cancelled.
2. The foreign priority document JP 2003-418112 filed on December 16, 2003 was received and acknowledged. However, in order to benefit of the earlier filing date, a certified English translation is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3, 12, 14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koyanagi et al. (WO 03/072634, wherein the citations are from the English equivalent document US Pg-Pub 2005/0153530) in view of Wyatt et al. (US Pg-Pub 2003/0118946).

With regard to claims 3 and 16, Koyanagi et al. disclose that the developer for a photosensitive composition may be a solvent, such as cyclohexanone, tetramethylbenzene, propylene glycol monomethyl ether acetate (par.0123).

Koyanagi et al. fail to disclose that these solvents may be used in combination/mixture.

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However, it would have been obvious to one of ordinary skill in the art at the time of the invention to use more than one solvent for the developer of Koyanagi et al., for the same purpose.

"It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose.... [T]he idea of combining them flows logically from their having been individually taught in the prior art." *In re Kerkhoven*, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980) (MPEP 2144.06.I—Combining Equivalents Known For the Same Purpose).

The tetramethylbenzene of Koyanagi et al. is equivalent to the "C₁₀-based aromatic hydrocarbon" of claim 3.

Cyclohexanone and propylene glycol monomethyl ether acetate of Koyanagi et al. are equivalent to the solvent other than aprotic polar solvents of the instant application, which are a ketone and a glycol ether carboxylate.

Cyclohexanone and propylene glycol monomethyl ether acetate of Koyanagi et al. also meet the limitation of claim 16.

Koyanagi et al. fail to disclose the amount of tetramethylbenzene in the developer.

Wyatt et al. disclose developing solvent compositions, wherein such composition comprises mixtures of solvents including aromatic hydrocarbons (see table 1, par.0062). Wyatt et al. disclose mixtures of solvents comprising 20% by mass of aromatic hydrocarbons (see Example 4 in table 1, par.0062).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use tetramethylbenzene in an amount of 20% by mass in a solvent mixture used as developer for the photosensitive resin of

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Koyanagi et al., as taught by Wyatt et al., with a reasonable expectation of success.

Koyanagi et al. shows that the developer dissolves the unexposed areas of the photosensitive resin (par.0171) so it is a photosensitive composition remover.

The fact that the remover is used "for removal of an uncured photosensitive composition" and "for removal of a photosensitive composition containing a pigment" is merely an intended use and adds no patentable weight to the claim.

Therefore, the developer of Koyanagi modified by Wyatt is equivalent to the photosensitive composition remover of the instant application.

Claim 12 contains only limitations regarding the intended use of the remover composition of claim 3 and such limitations do not add any patentable weight to the claim. Therefore, the developer of Koyanagi modified by Wyatt meets the limitations of the claim.

With regard to claim 14, tetramethylbenzene, cyclohexanone and propylene glycol monomethyl ether acetate are organic solvents (see par.0123 of Koyanagi et al.)

5. Claims 3, 16 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kamayachi et al. (US Patent 4,943,516) in view of Wyatt et al. (US Pg-Pub 2003/0118946).

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With regard to claims 3, 16 and 19, Kamayachi et al. teach a developing solution for a photosensitive resin composition, wherein the developing solution may comprise solvents such as cyclohexanone, propylene glycol monomethyl ether and tetramethylbenzene (column 15, lines 43-51).

Kamayachi et al. fail to disclose that such solvents may be used in combination/mixture as developer.

However, it would have been obvious to one of ordinary skill in the art at the time of the invention to use more than one solvent for the developer of Kamayachi et al., for the same purpose (MPEP 2144.06.I—Combining Equivalents Known For the Same Purpose).

The tetramethylbenzene of Kamayachi et al. is equivalent to the C₁₀-based aromatic hydrocarbon of claim 3 and to the aromatic hydrocarbon with more than 9 carbon atoms of claim 19.

Cyclohexanone and propylene glycol monomethyl ether of Kamayachi et al. is equivalent to a solvent other than aprotic polar solvents of the instant application, which are a ketone and a glycol ether.

Cyclohexanone and propylene glycol monomethyl ether of Kamayachi et al. also meet the limitations of claims 16 and 19.

Kamayachi et al. fail to disclose the amount of tetramethylbenzene in the developer.

Wyatt et al. disclose developing solvent compositions, wherein such composition comprises mixtures of solvents including aromatic hydrocarbons

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(see table 1, par.0062). Wyatt et al. disclose mixtures of solvents comprising 20% by mass of aromatic hydrocarbons (see Example 4 in table 1, par.0062).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use tetramethylbenzene in an amount of 20% by mass in a solvent mixture used as developer for the photosensitive resin of Kamayachi et al., as taught by Wyatt et al., with a reasonable expectation of success.

Kamayachi et al. further show that the unexposed portion of the photosensitive resin composition coating is developed with the developer solution (column 16, lines 15-17). Therefore, the developer of Kamayachi modified by Wyatt is a "photosensitive composition remover".

The fact that the remover is used "for removal of an uncured photosensitive composition" and "for removal of a photosensitive composition containing a pigment" is merely an intended use and adds no patentable weight to the claim.

Therefore, the developer of Kamayachi modified by Wyatt is equivalent to the photosensitive composition remover of the instant application.

6. Claims 6 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kamayachi et al. (US Patent 4,943,516) in view of Wyatt et al. (US Pg-Pub 2003/0118946) as applied to claim 3 and in further view of Dhillon (US Patent 4,822,723).

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With regard to claims 6 and 18, Kamayachi modified by Wyatt teach a developer which may comprise a mixture of tetramethylbenzene, propylene glycol monomethyl ether and cyclohexanone (see paragraph 5 above). However, Kamayachi and Wyatt fail to disclose the amount of propylene glycol monomethyl ether in the developer.

Dhillon teaches a developer composition for printing plates (abstract), wherein said developer composition may comprise between 25-75% by weight of propylene glycol monomethyl ether (column 3, lines 19-22).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use propylene glycol monomethyl ether in an amount between 25% and 75% by weight in the developer composition of Kamayachi modified by Wyatt, with a reasonable expectation of success.

Terminal Disclaimer

7. The terminal disclaimer filed on September 27, 2010 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of any patent issued from co-pending Application No. 11/794547 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Response to Amendment

8. The Declaration under 37 CFR 1.132 filed on September 27, 2010 is insufficient to overcome the rejection of claim 3 based upon Koyanagi et al. (WO

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03/072634, wherein the citations are from the English equivalent document US Pg-Pub 2005/0153530) in view of Wyatt et al. (US Pg-Pub 2003/0118946) and the rejection of claim 3 based upon Kamayachi et al. (US Patent 4,943,516) in view of Wyatt et al. (US Pg-Pub 2003/0118946) as set forth in the last Office action because the evidence is not commensurate with the scope of claim 3.

The Declaration filed on September 27, 2010 shows the Solvent mixture (B), which is within the scope of claim 3:

Solvent mixture (B): 10 percent by weight of Solfine®-TM (a basically C₉ aromatic hydrocarbon-based mixed solvent, from Showa Denko K.K.), 10 percent by weight of SW 1500 (a basically C₁₀ aromatic hydrocarbon-based mixed solvent), 20 percent by weight of propylene glycol monomethyl ether, and 60 percent by weight of cyclohexanone

(see page 2 of the Declaration).

However, claim 3 recites:

3. (currently amended): A photosensitive composition remover used for removal of an uncured photosensitive composition, which remover consists essentially of 10 to 20 percent by mass of one or more aromatic hydrocarbon(s) having 9 carbon atoms or more within the molecule and 80 to 90 percent by mass of one or more other solvent(s) other than aprotic polar solvents,

wherein the aromatic hydrocarbon is basically C₉ or C₁₀-based,

wherein the photosensitive composition remover is used for removal of a photosensitive composition containing a pigment;

wherein the other solvent other than aprotic polar solvents is at least one selected from the group consisting of glycol ethers excluding dipropylene glycol monomethyl ether, glycol ether carboxylates, carboxylic acid esters excluding ethyl acetate and amyl acetate, hydroxycarboxylic acid esters, ketones, alkoxycarboxylic acids esters, and cyclic ethers.

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The specification of the instant application shows that the C9-based aromatic hydrocarbon may be represented by several solvents under the commercial names Shellsol A, Solvesso 100, Swasol 1000, Ipsol 100, Hisol 100, Solfine-TM. These solvents are different from each other (they have different initial boiling points and dry points) (see page 11).

The specification also shows that C10-based aromatic hydrocarbon may be represented by several solvents under the commercial names Shellsol AB, Solvesso 150, Swasol 1500, Ipsol 150, Hisol 150, Solfine-WZ. These solvents are different from each other (they have different initial boiling points and dry points) (see page 11).

The specification of the instant application also shows an extensive list of glycol ethers, glycol ether carboxylates, carboxylic acid esters, ketones and alkoxycarboxylic esters and cyclic ethers (see pages 16-18).

Based on the teachings of the specification, the *composition of claim 3 represents a great variety of solvent mixtures.*

As the Declaration under 37 CFR 1.132 shows *only one solvent mixture* within the scope of claim 3, the evidence presented in the Declaration is not commensurate with the scope of claim 3

Therefore, the Declaration under 37 CFR 1.132 is not sufficient to overcome the rejections of record.

Response to Arguments

9. Applicant's arguments filed on September 27, 2010, see pages 7-8 of the Remarks, have been fully considered but they are not persuasive.

First of all, the examiner would like to note the following:

- The provisional rejection of claims 3, 6, 12, 16, 18 and 19 on the ground of nonstatutory obviousness-type double patenting over claims 2, 10 and 19 of co-pending Application No. 11/794,547 is withdrawn following the filing of a Terminal Disclaimer.

-The rejection of claims 3, 12 and 14 under 35 USC 102(b) over Kikuhara et al. (JP 04-182062) is withdrawn following the applicant's amendment to claim 3.

- The rejection of claims 3, 12 and 14 under 35 USC 102(b) over Serdiuk et al. (US Patent 5,276,096) is withdrawn following the applicant's amendment to claim 3.

On page 8 of the Remarks, the applicant argues that the Declaration under 37 CFR 1.132 compares the cleanability of the composition of Example 4 of Wyatt et al. with the cleanability of the composition of the instant application.

The applicant further argues that the Declaration shows that the composition of the instant application has unexpected superior cleanability for a photosensitive composition comprising a pigment and that it would not have been obvious to one of ordinary skill in the art to establish a combination of solvents with superior cleanability.

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The examiner would like to point out that the Declaration under 37 CFR 1.132 filed on September 27, 2010 is not sufficient to overcome the rejection of claim 3 under 35 USC 103(a) over Koyanagi et al. (WO 03/072634, wherein the citations are from the English equivalent document US Pg-Pub 2005/0153530) in view of Wyatt et al. (US Pg-Pub 2003/0118946) and the rejection of claim 3 under 35 USC 103(a) over Kamayachi et al. (US Patent 4,943,516) in view of Wyatt et al. (US Pg-Pub 2003/0118946) because the evidence is not commensurate with the scope of claim 3 (see paragraph 8 above).

Conclusion

10. Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANCA EOFF whose telephone number is (571)272-9810. The examiner can normally be reached on Monday-Friday, 6:30 AM-4:00 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H. Kelly can be reached on 571-272-1526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. E./

Examiner, Art Unit 1795

/Cynthia H Kelly/

Supervisory Patent Examiner, Art Unit 1722